CTTCCACTTCCTCTGTAATGGTGGAACCAAAACCCTAGATTCCCCCTTTCATCTTCTCTA
CTTCCCACACTTTTCTCTCTCACAAACTCTTGAGAAATGAAGACTTTTTCAAGCTTCTTT
CTCTCTGTAACAACTCTCTTCTTCTTCTCCTTCTTTTCTCTTTCATTTCAAGCTTCACCA
TCTCAGTCTTTATACAGAGAAATCCATCAGCTTATAAGCTTCAAAGACGTTCTTCCTGAC
AAGAATCTTCTCCCAGACTGGTCTTCCAACAAAAACCCGTGTACTTTCGATGGCGTTACT
TGCAGAGACGACAAAGTTACTTCGATTGATCTCAGCTCCAAGCCTCTCAACGTCGGATTC
AGTGCCGTGTCCTCGTCTCTCCTGTCTCTCACCGCATTAGAGTCTCTGTTTCTCTCAAAC
TCACACATCAATGGCTCCGTTTCTGGCTTCAAGTGCTCTGCTTCTTTAACCAGCTTGGAT
CTATCTAGAAACTCTCTTTCGGGTCCTGTAACGACTCTAACAAGCCTTGGTTCTTGCTCC
GGTCTGAAGTTTCTTAACGTCTCTTCCAATACACTTGATTTTCCCGGGAAAGTTTCAGGT
GGGTTGAAGCTAAACAGCTTGGAAGTTCTGGATCTTTCTGCGAATTCAATCTCCGGTGCT
AACGTCGTTGGTTGGGTTCTCTCCGATGGGTGTGGAGAGTTGAAACATTTAGCGATTAGC
GGAAACAAAATCAGTGGAGACGTCGATGTTTCTCGCTGCGTGAATCTCGAGTTTCTCGAT
GTTTCCTCCAACAATTTCTCCACTGGGATTCCTTTCCTCGGAGATTGCTCTGCTCTGCAA
CATCTTGACATCTCCGGGAACAAATTATCCGGCGATTTCTCCCGTGCTATCTCTACTTGC
ACAGAGCTCAAGTTGTTGAACATCTCTAGTAACCAATTCGTCGGACCAATCCCTCCGCTA
CCGCTTAAAAGTCTCCAATACCTCTCTCTGGCCGAGAACAAATTCACCGGCGAGATCCCT
GACTTTCTCTCCGGCGCGTGTGATACACTCACTGGTCTCGATCTCTCTGGAAATCATTTC
TACGGTGCGGTTCCTCCATTCTTCGGTTCATGTTCTCTTCTCGAATCACTCGCGTTGTCG
AGTAACAACTTCTCTGGCGAGTTACCGATGGATACGTTGTTGAAGATGAGAGGACTCAAA
GTACTTGATCTGTCTTTCAACGAGTTTTCCGGCGAATTACCGGAATCTCTGACGAATCTA
TCCGCTTCGTTGCTAACGTTAGATCTCAGCTCCAACAATTTCTCCGGTCCGATTCTCCCA
AATCTCTGCCAGAACCCTAAAAACACTCTGCAGGAGCTTTACCTTCAGAACAATGGCTTC
ACCGGGAAGATTCCACCGACTTTAAGCAACTGTTCTGAGCTGGTTTCGCTTCACTTGAGC
TTCAATTACCTCTCCGGGACAATCCCTTCGAGCTTAGGCTCTCTATCGAAGCTTCGAGAT
CTGAAACTATGGCTGAATATGTTAGAAGGAGAGATCCCTCAGGAGCTCATGTATGTCAAG
ACCTTAGAGACTCTGATCCTCGACTTCAACGATTTAACCGGTGAAATCCCTTCCGGTTTA
AGTAACTGTACCAATCTTAACTGGATTTCTCTGTCGAATAACCGGTTAACCGGTGAGATT
CCGAAATGGATTGGCCGGTTAGAGAATCTCGCTATCCTCAAGTTAAGCAACAATTCATTC
TCCGGGAACATTCCGGATGAGCTCGGCGACTGCAGAAGCTTAATCTGGCTTGATCTCAAC
ACCAATCTCTTCAATGGAACGATTCCGGCGGCGATGTTTAAACAATCCGGGAAAATCGCT
GCCAATTTCATCGCCGGTAAGAGGTACGTTTATATCAAAAACGATGGGATGAAGAAAGAG
TGTCATGGAGCTGGTAATTTACTTGAGTTTCAAGGAATCAGATCCGAACAATTAAACCGG
CTTTCAACGAGGAACCCTTGTAATATCACTAGCAGAGTCTATGGAGGTCACACTTCGCCG
ACGTTTGATAACAATGGTTCGATGATGTTTCTGGACATGTCTTACAACATGTTGTCTGGA
TACATACCGAAGGAGATTGGTTCGATGCCTTATCTGTTTATTCTCAATTTGGGTCATAAC
GATATCTCTGGTTCGATTCCTGATGAGGTAGGTGATCTAAGAGGTTTAAACATTCTTGAT
CTTTCAAGCAATAAGCTCGATGGGAGGATTCCTCAGGCTATGTCAGCTCTTACTATGCTT
ACGGAAATCGATTTGTCGAATAATAATTTGTCTGGTCCGATTCCTGAGATGGGTCAGTTT
GAGACTTTTCCACCGGCTAAGTTCTTGAACAATCCTGGTCTCTGTGGTTATCCTCTTCCG
CGGTGTGATCCTTCAAATGCAGACGGTTATGCTCATCATCAGAGATCTCATGGAAGGAGA
CCAGCGTCCCTTGCTGGTAGTGTGGCGATGGGATTGTTGTTCTCTTTTGTGTGTATATTT
GGGCTGATCCTTGTTGGTAGAGAGATGAGGAAGAGACGGAGAAAGAAAGAGGCGGAGTTG
GAGATGTATGCGGAAGGACATGGAAACTCTGGCGATAGAACTGCTAACAACACCAATTGG
AAGCTGACTGGTGTGAAAGAAGCCTTGAGTATCAATCTTGCTGCTTTCGAGAAGCCATTG
CGGAAGCTCACGTTTGCGGATCTTCTTCAGGCTACCAATGGTTTCCATAATGATAGTCTG
ATTGGTTCTGGTGGGTTTGGAGATGTTTACAAAGCGATTTTGAAAGATGGAAGCGCGGTG
GCTATCAAGAAACTGATTCATGTTAGCGGTCAAGGTGATAGAGAGTTCATGGCGGAGATG
GAAACCATTGGGAAGATCAAACATCGAAATCTTGTGCCTCTTCTTGGTTATTGCAAAGTT

FIGURE 1A

GGAGACCAGCGGCTTCTTGTTAATGAGGTTATGAAGTATGGAAGTTTAGAAGATGTTTTG
CAAGACCCCAAGAAAGGTGGGGTGAAACTTAAATTGTCCACACGGCGGAAGATTGCGATA
GGATCAGCTAGAGGGCTTGCTTTCCTTCACCACAACTGCAGTCCGCATATCATCCACAGA
GACATGAAATCCAGTAATGTGTTGCTTGATGAGAATTTGGAAGCTCGGGTTTCAGATTTT
GGCATGGCGAGGCTGATGAGTGCGATGGATACGCATTTAAGCGTCAGTACATTAGCTGGT
ACACCGGGTTACGTTCCTCCAGAGTATTACCAAAGTTTCAGGTGTTCAACAAAAGGAGAC
GTTTATAGTTACGGTGTGGTCTTACTCGAGCTACTCACGGGTAAACGGCCAACGGATTCA
CCGGATTTTGGAGATAACAACCTTGTTGGATGGGTGAAACAGCACGCAAAACTGCGGATT
AGCGATGTGTTTGACCCGGAGCTTATGAAGGAAGATCCAGCATTAGAGATCGAACTTTTA
CAACATTTAAAAGTTGCGGTTGCGTGTTTGGATGATCGGGCTTGGAGACGACCGACAATG
GTACAAGTCATGGCCATGTTTAAGGAGATACAAGCCGGGTCAGGGATAGATTCACAGTCA
ACGATCAGATCAATAGAGGATGGAGGGTTCAGTACAATAGAGATGGTTGATATGAGTATA
AAAGAAGTTCCTGAAGGAAAATTATGAGAGTTAGAAACAGAGCCAAAGCAGATTCTTTGA
ACATCAAAATCATCTAAGGGTCAGTCCGATTTTCCTTGGGTCTATTTTTTTTTGTATTTTC
TACTATATGCTAAGTGTATGTATCTATGTTATTTATACATAAGACGGATGTTTTTTTTTTT
CGGGCTCGGTCGAATTGGGGGTGGTGGAGAATAGAACTAAGTAATAACTTTGTTAAGAAT
ATGTAAATATACAGTTTTTTGGGGAGGGATTTGTAATGTTTTCGTTTTTAGTTCTATGGA
AATTTCTACGTTGCTAACAAATTAAATTTATAATGAATCATGAAGAAACAAAGAGCCAAT
GTGTATTAAATTTCGACTGATCATGTTCATGTAAATGCACGTGACCTATTAATTCATTAT
TGTCGGAATTAATTTGGGGAATTC

FIGURE 1B

MKTFSSFFLSVTTLFFFSFFSLSFQASPSQSLYREIHQLISFKDVLPDKN
LLPDWSSNKNPCTFDGVTCRDDKVTSIDLSSKPLNVGFSAVSSSLLSLTG
LESLFLSNSHINGSVSGFKCSASLTSLDLSRNSLSGPVTTLTSLGSCSGL
KFLNVSSNTLDFPGKVSGGLKLNSLEVLDLSANSISGANVVGWVLSDGCG
ELKHLAISGNKISGDVDVSRCVNLEFLDVSSNNFSTGIPFLGDCSALQHL
DISGNKLSGDFSRAISTCTELKLLNISSNQFVGPIPPLPLKSLQYLSLAE
NKFTGEIPDFLSGACDTLTGLDLSGNHFYGAVPPFFGSCSLLESLALSSN
NFSGELPMDTLLKMRGLKVLDLSFNEFSGELPESLTNLSASLLTLDLSSN
NFSGPILPNLCQNPKNTLQELYLQNNGFTGKIPPTLSNCSELVSLHLSFN
YLSGTIPSSLGSLSKLRDLKLWLNMLEGEIPQELMYVKTLETLILDFNDL
TGEIPSGLSNCTNLNWISLSNNRLTGEIPKWIGRLENLAILKLSNNSFSG
NIPDELGDCRSLIWLDLNTNLFNGTIPAAMFKQSGKIAANFIAGKRYVYI
KNDGMKKECHGAGNLLEFQGIRSEQLNRLSTRNPCNITSRVYGGHTSPTF
DNNGSMMFLDMSYNMLSGYIPKEIGSNPYLFILNLGHNDISGSIPDEVGD
LRGLNILDLSSNKLDGRIPQAMSALTMLTEIDLSNNNLSGPIPEMGQFET
FPPAKFLNMPGLCGYPLPRCDPSNADGYAHHQRSHGRRPASLAGSVAMGL
LFSFVCIFGLILVGREMRKRRRKKEAELEMYAEGHGNSGDRTANNTNWKL
TGVKEALSINLAAFEKPLRKLTFADLLQATNGFHNDSLIGSGGFGDVYKA
ILKDGSAVAIKKLIHVSGQGDREFMAEMETIGKIKHRNLVPLLGYCKVGD
ERLLVNEVMKYGSLEDVLQDPKKGGVKLKLSTRRKIAIGSARGLAFLHHN
CSPHIIHRDMKSSNVLLDENLEARVSDFGMARLMSAMDTHLSVSTLAGTP
GYVPPEYYQSFRCSTKGDVYSYGVVLLELLTGKRPTDSPDFGDNNLVGWV
KQHAKLRISDVFDPELMKEDPALEIELLQHLKVAVACLDDRAWRRPTMVQ
VMAMFKEIQAGSGIDSQSTIRSIEDGGFSTIEMVDMSIKEVPEGKL

FIGURE 1C

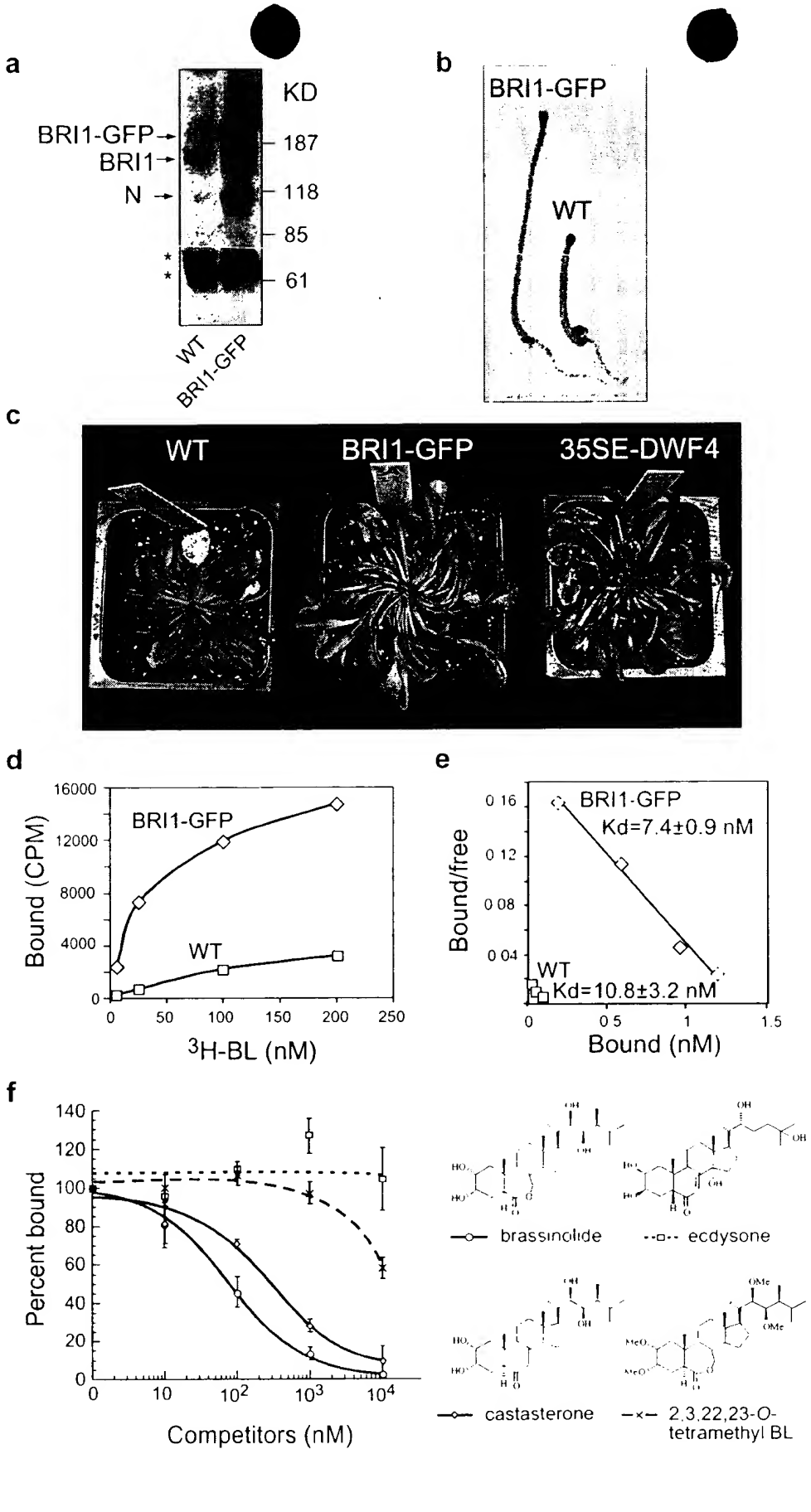
a
KD
BRI1-GFP
BRI1
N
187
118
85
61
WT
BRI1-GFP
b
BRI1-GFP
WT
c
WT
BRI1-GFP
35SE-DWF4
d
BRI1-GFP
WT
Bound (CPM)
16000
12000
8000
4000
0
0
50
100
150
200
250
3H-BL (nM)
e
BRI1-GFP
Kd=7.4±0.9 nM
WT
Kd=10.8±3.2 nM
Bound/free
0 16
0 12
0 08
0 04
0
0 5
1
1.5
Bound (nM)
f
Percent bound
140
120
100
80
60
40
20
0
0
10
10^2
10^3
10^4
Competitors (nM)
brassinolide
ecdysone
castasterone
2,3,22,23-O-tetramethyl BL

FIG. 2

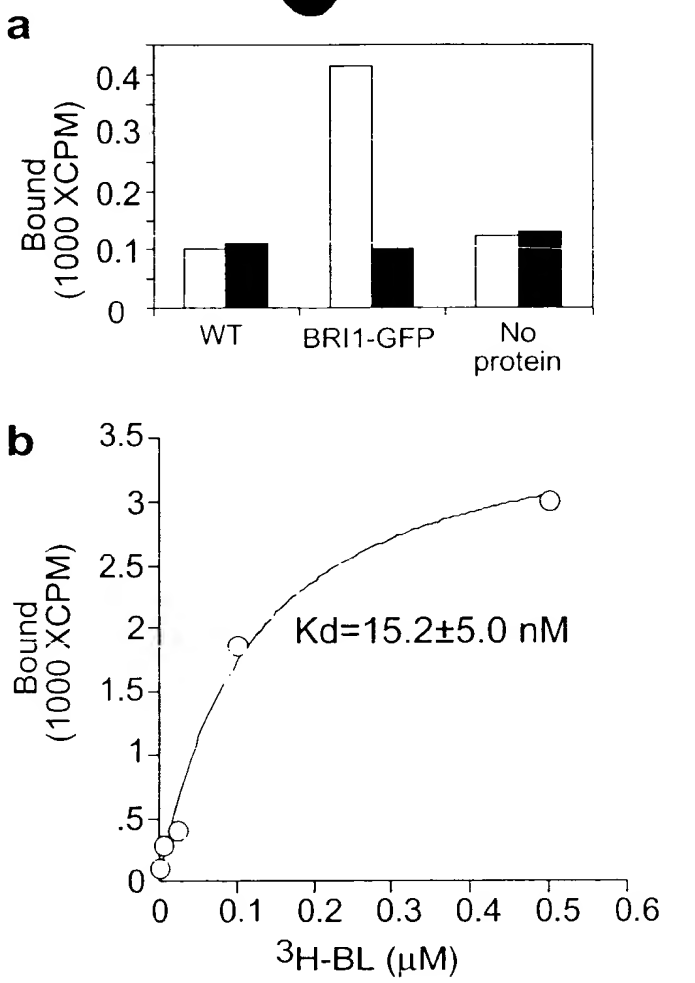
a
Bound (1000 XCPM)
0.4
0.3
0.2
0.1
0
WT
BRI1-GFP
No protein
b
Bound (1000 XCPM)
3.5
3
2.5
2
1.5
1
.5
0
Kd=15.2±5.0 nM
0
0.1
0.2
0.3
0.4
0.5
0.6
3H-BL (μM)
c
Bound (1000 XCPM)
3
2
1
0
wt
det2
bri1-6
bri1-116
bri1-104
bri1-102
d
μl
WT
18 12 8 6 4 2 1
WT
bri1-6
det2
bri1-104
bri1-102
bri1-116
BRI1

FIG. 3

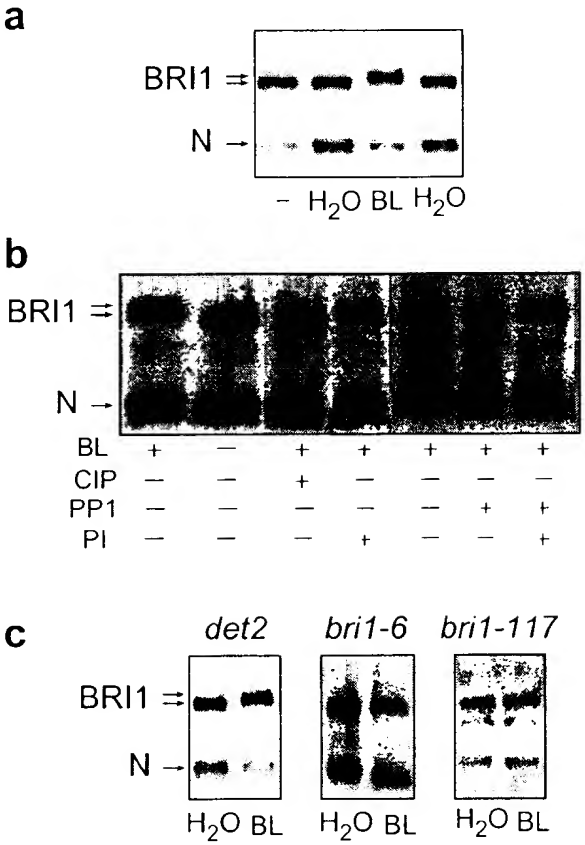
a
BRI1
N
– H_2O BL H_2O
b
BRI1
N
BL + – + + + + +
CIP – – + – – – –
PP1 – – – – – + +
PI – – – + – – +
c
det2
bri1-6
bri1-117
BRI1
N
H_2O BL
H_2O BL
H_2O BL

FIG. 4